

3. (Twice Amended) The process of claim 1, further comprising: using an air ratio in
d a range of 0.4 to 0.8, thereby to achieve substoichiometric gasification of the gasified waste
materials [and] at a gasification temperature [of the gasified waste materials] in [the] a range of
600 to 850°C.

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d 4. (Twice Amended) The process of claim 2 further comprising: using an air ratio in
a range of 0.4 to 0.8, thereby to achieve substoichiometric gasification of the gasified waste
materials [and] at a gasification temperature [of the gasified waste materials] in [the] a range of
600 to 850°C.

5. (Twice Amended) The process as in claim 1, and further comprising: in a second
furnace which is operatively connected to the first furnace, using the[generated] combustible
gas[es] generated from the first furnace to burn combustible components which come from only
the first furnace.

11
6. (Twice Amended) The process as in claim 1, further comprising: adding
combustion air to the [exhaust] combustible gas coming from the first furnace.

9
7. (Twice Amended) The process as in claim 5 comprising: in the second furnace,
adding combustion air to the [exhaust] combustible gas coming from the first furnace wherein the
grade and the amount of the combustion air[,] added depends on the calorific value of the
combustible components.

10. (Twice Amended) The process of claim 5 and further comprising: recirculating [exhaust] waste gas from the second furnace, after cooling of said waste gas in a heat recovery system, thereby to mix the recirculated waste gas back into the second furnace with the combustible gas coming from the first furnace.

11. (Twice Amended) The process of claim 5[, characterized by the fact that] wherein the air ratio in the second furnace is in a range of 1.1 to 1.8.

12. (Twice Amended) The process as in claim 5[, characterized by the fact that] wherein the combustion temperature in the second furnace is in a range of 950 to 1250°C.

(Added) A process for creating and utilizing gas from waste materials wherein the waste materials comprise combustible components, the waste materials residing in a charging area above a grate of a furnace and being conveyed along the grate in the furnace with combustion air being supplied to the furnace, the grate including at least two undergrate forced draft chambers arranged in the longitudinal direction of the grate, said process comprising:

supplying combustion air to the undergrate forced draft chambers in such a way that the waste materials residing in the charging area above a first of the undergrate forced draft chambers are ignited while oxygen is supplied at a superstoichiometric level through the first undergrate forced draft chamber, and ^{such that} at any further undergrate forced draft chambers, said supplying occurs in a manner so that combustion is limited to a substoichiometric level necessary for gasification of the combustible components.